

CLAIM AMENDMENTS

1. (Currently Amended) An apparatus comprising:
a mirror array to form a projected image comprising pixels, the mirror array comprising mirrors; and, a first dimension of the array being associated with intensity values for the pixels;
and
a circuit to, for each pixel, control the mirror array to control the number of the mirrors that reflect light into an optical path that intersects a location of the pixel based on an intensity for the pixel ~~selectively combine reflected light from at least two mirrors of the array to regulate an intensity of the pixel.~~
2. (Cancelled)
3. (Currently Amended) The apparatus of claim ~~2~~ 1, wherein, for each pixel, the circuit controls the mirror array to cause a greater number of ~~said of at least two~~ the mirrors to reflect light into the optical path for a higher intensity level than a number of ~~said of at least two~~ the mirrors that reflect light into the optical path for a lower intensity level.
4. (Original) The apparatus of claim 1, wherein each pixel of the projected image is uniquely associated with at least two mirrors of the array.
5. (Original) The apparatus of claim 1, wherein each pixel of the projected image is associated with a number of mirrors of the array substantially equal to the number of potential gray levels of the pixel.
6. (Original) The apparatus of claim 1, wherein the circuit does not use pulse width modulation to regulate the intensity of each pixel.

7. (Currently Amended) The apparatus of claim 1, wherein a first dimension of the array is associated with intensity values for the pixels and a different second dimension of the array is associated with pixel positions of the projected.

8. (Currently Amended) The apparatus of claim 1, further comprising:
optics to, for each pixel, merge other optical paths extending from said at least two mirrors into ~~a single~~ said optical path that intersects a the location of the pixel.

9. (Original) The apparatus of claim 8, wherein the optics compresses a two-dimensional image formed from light reflected from the mirror array into a one-dimensional sub-image of the projected image.

10. (Currently Amended) The apparatus of claim 1, wherein, for each pixel, the intensity of the pixel is indicated by a multiple bit digital value and the mirrors of the array are organized into different groups, each group of mirrors being associated with a different bit of the digital value.

11. (Currently Amended) A method comprising:
using a mirror array to form a projected image, the mirror array comprising mirrors and
the projected image comprising pixels; and
~~associating a first dimension of the array with intensity values for the pixels; and~~
for each pixel, controlling the mirror array to control the number of the mirrors that
reflect light into an optical path that intersects a location of the pixel based on an intensity for the
pixel ~~selectively combine reflected light from at least two mirrors of the array to regulate an~~
~~intensity of each pixel.~~

12. (Cancelled)

13. (Currently Amended) The method of claim ~~12~~ 11, wherein the controlling the mirror array ~~to selectively tilt~~ comprises:

for each pixel, controlling the mirror array to cause a greater number of ~~said of at least two~~ the mirrors to reflect light into the optical path for a higher intensity level than a number of ~~said of at least two~~ the mirrors that reflect light into the optical path for a lower intensity level.

14. (Currently Amended) The method of claim 11, further comprising:

uniquely associating each pixel of the projected image with at least two of the mirrors ~~of the array~~.

15. (Original) The method of claim 11, further comprising:

associating each pixel of the projected image with a number of mirrors of the array substantially equal to the number of potential gray levels of the pixel.

16. (Original) The method of claim 11, wherein the controlling does not include using pulse width modulation to regulate the intensity of each pixel.

17. (Currently Amended) The method of claim 11, ~~further comprising:~~ wherein a first dimension of the array is associated with intensity values for the pixels, the method further comprising:

using a different second dimension of the array to identify pixel positions of the projected image.

18. (Currently Amended) The method of claim 11, further comprising:

merging other optical paths extending from ~~said~~ at least two of the mirrors into a single optical path that intersects a location of the pixel.

19. (Original) The method of claim 18, further comprising:
compressing a two-dimensional image formed from light reflected from the mirror array
into a one-dimensional sub-image of the projected image.

20. (Currently Amended) The method of claim 11, wherein, for each pixel, the
intensity of the pixel is indicated by a multiple bit digital value, the method further comprising:
organizing the mirrors of the array into different groups, each group of mirrors being
associated with a different bit of the digital value.

21. (Currently Amended) A projection system comprising:
condensing optics;
a mirror array to form a projected image comprising pixels, the mirror array comprising
mirrors pixels, a first dimension of the array being associated with intensity values for the pixels;
and
a circuit to, for each pixel, control the mirror array control the number of the mirrors that
reflect light into an optical path that intersects a location of the pixel based on an intensity for the
pixel to selectively direct reflected light from the mirror array into the condensing optics from at
least two mirrors of the array to regulate an intensity of the pixel.

22. (Cancelled)

23. (Currently Amended) The projection system of claim 22 21, wherein, for each
pixel, the circuit controls the mirror array to cause a greater number of ~~said of at least two~~ the
mirrors to reflect light into the optical path for a higher intensity level than a number of the two
mirrors that reflect light into the optical path for a lower intensity level.

24. (Original) The projection system of claim 21, wherein each pixel of the projected
image is uniquely associated with at least two mirrors of the array.

25. (Original) The projection system of claim 21, wherein each pixel of the projected image is associated with a number of mirrors of the array substantially equal to the number of potential gray levels of the pixel.

26. (Original) The projection system of claim 21, wherein the circuit does not use pulse width modulation to regulate the intensity of each pixel.

27. (Currently Amended) The projection system of claim 21, wherein a first dimension of the array is associated with intensity values for the pixels; and
~~wherein~~ a different second dimension of the array is associated with pixel positions of a projected image.

28. (Original) The projection system of claim 21, wherein, for each pixel, the intensity of the pixel is indicated by a multiple bit digital value and mirrors of the array are organized into different groups, each group of mirrors being associated with a different bit of the digital value.

29. (Currently Amended) A projection system comprising:
condensing optics to form a projected image comprising pixels;
~~a mirror array comprising pixels;~~
a mirror array comprising mirrors; a first dimension of the array being associated with
~~intensity values for the pixels;~~
a processor coupled to the mirror array; and
a flash memory storing instructions to cause the processor to, for each pixel, control the
number of the mirrors that reflect light into an optical path that intersects a location of the pixel
based on an intensity for the pixel ~~the mirror array to selectively direct reflected light from the~~
~~mirror array into the condensing optics from at least two mirrors of the array to regulate an~~
~~intensity of the pixel.~~

30. (Currently Amended) An article comprising a computer-readable storage medium storing instructions to when executed cause a computer to:

control a mirror array to produce a projected image, the array projected image comprising pixels and the mirror array comprising mirrors ~~a first dimension of the array being associated with intensity values of the pixels; and~~

for each pixel of the image, control the mirror array to control the number of the mirrors that reflect light into an optical path that intersects a location of the pixel based on an intensity for the pixel ~~selectively direct reflected light from the mirror array in an optical path toward the projected image from at least two mirrors of the array to regulate an intensity of the pixel.~~

31. (Currently Amended) The article of claim 30, further comprising instructions to cause the computer to control the mirror array to direct the reflected light toward the condensing optics.

32. (Previously Presented) The article of claim 30, further comprising instructions to cause the computer to group mirrors of the array into groups of multiple mirrors, each group being associated with a different pixel of the projected image and the mirrors of each group collectively forming a gray scale intensity for the associated pixel.

33. (Currently Amended) The projection system of claim 29, wherein a first dimension of the array is associated with intensity values for the pixels; and
a different second dimension of the array is associated with pixel positions of a projected image.